

A MIRACLE IN PISA

The campanile of the Cathedral of Pisa, the most famous tower in the world, owes its celebrity to the fact that it leans perceptibly to the ground. This oscillation, which seems to have suddenly stopped by enchantment, augments **its** fascination, but also causes a lot of worry about its destiny. The Tower of Pisa had to be closed to the public for many years. The splendid panorama which could be enjoyed from the top of the great marble staircase that rises inside the cylindrical edifice, was, for native Pisans and tourists, only a memory. However, on June 17th 2000 **it** was opened just for a day for the feast of the city's patron saint, San Ranieri. The following year on the same date the building was again permanently accessible, when the consolidation work, carried out on it after its collapse by the Committee for the Safeguarding of the Tower, was completed.

Before restoration the Pisan monument ran two risks: that the wall might break at the level of the first loggia, **which** could have led to the collapse of the entire superstructure, or that the entire tower might fall over if the ground around the foundations gave way.

The committee, which included internationally famous experts, undertook in-depth studies utilizing a data and photography campaign and a series of highly sophisticated instruments. The committee sustained the theory of the great scholar, Fernando Terracina **who** had already published a complete recovery project in 1962. **His** theory overturned the assumption that the sinking ground caused the tower to lean but that, on the contrary, it was the rising of the ground on the other side that created the problem. So the best way to solve the problem was simply to dig into the subsoil and remove earth at the side where the tower was being pushed up. At the end of this operation, the infinite disquisition on measurements, static equilibrium, renovations, structures and so on, that had characterised the history of the tower, would finally cease.

The foundations to the bell tower of the cathedral were laid in 1173 to celebrate the victory of the Pisan fleet over the Saracens at Palermo. Just a few meters away on the same esplanade called "Il Campo dei Miracoli", Diotalvi had already begun work on the baptistery and the cemetery was going to be situated nearby. The idea of gathering all the important symbolic buildings of the city in one monumental urban complex derived from the concept of the Roman forum, reinterpreted in the Christian key by following a course - from birth to death and redemption through baptism - that was represented in the architectural elements. In this context the role of the bell tower, oddly distant from the church to which it belonged, was to connect the urban centre and the esplanade which was on the edge of the city. It seems that the 60 metre- high tower began to lean almost immediately and Giovanni Pisano was called to solve the slight tilt. Giorgio Vasari wrote in his "Lives of Painters, Sculptors and Architects" that the fault was due to the inability of Bonanno Pisano, others believe that the creator of the tower deliberately challenged the laws of static equilibrium. No records document the identity of the architect. Hypotheses attribute the tower's design to Bonanno Pisano, Diotalvi or even Biduino. Inclination proceeded extremely slowly until 1838 when Alessandro Della Gherardesca compromised the already precarious equilibrium by uncovering the buried part of the building. Millimetre by millimetre the tower leaned until it reached the inclination of 55°, that is circa 10%, however the committee is optimistic that working via the subsoil is the best way to ensure a long life for this unusual building **which**, after all, is located in an area dedicated to miracles.

Vocabulary: to lean – pendere, inchinarsi, enchantment – incanto, tilt - inclinazione, esplanade – spianata, to challenge – sfidare, disquisition – disputaione, subsoil – sottosuolo, to overturn – rovesciare, ensure – assicurare, sink – sprofondarsi, abbassarsi

1) Answer the following questions:

- a) In what year was the Tower of Pisa permanently opened to the public?
- b) What material is the staircase of the Tower of Pisa made of?
- c) What would happen if the wall at the level of the first loggia broke?
- d) Who designed and built the baptistery in Campo dei Miracoli?
- e) What did the committee do before it began restoration work on the tower?
- f) What buildings are situated on the same esplanade as the Tower of Pisa?
- g) Where did the idea of gathering all the important symbolic buildings in the same place originate?
- h) Why was the bell tower built?
- i) In which year were the foundations of the bell tower in Pisa laid?
- j) What did Fernando Terracina think was the solution to the problem of the tower?

2) Find one word in the text with similar meaning.

- a) visibly.....
- b) finished.....
- c) idea.....
- d) make sure.....
- e) able to be used.....

2) What or who do the following words refer to?

- a) "its" (line 3).....
- b) "who" (line 15).....
- c) "his" (line 16).....
- d) "which" (line 11).....
- e) "which" (line 39).....

4) Write true or false next to the following statements.

- a) The bell tower is near the church to which it belongs.
- b) There were only Italian experts in the Committee for the Safeguarding of the Tower.
- c) The tower didn't begin to lean until 1838.
- d) Diotalvi had begun to work on the baptistery before the foundations of the tower had been laid.
- e) The bell tower was opened permanently to the public after restoration in 2001.

